

ABSTRACT

Provided is an arm structure for a robot which can favorably carry out jobs which are typically performed by humans. By determining the length of the arm and the height of the axis of rotation of the arm in such a manner that a range of rotational motion of the arm in accessing the region can be covered by a range in which the fore-and-aft distance to the tip of the arm can be linearly approximated, even though the trajectory of the arm is approximated by a line, the error in the distance to the object can be limited within a prescribed range, and the practicality and economy of computation can be achieved at the same time.